

```
chain nodes:
    11 12 13 17 19 21

ring nodes:
    1 2 3 4 5 6 7 8 9 10

chain bonds:
    9-17 10-21 11-12 12-13 17-19

ring bonds:
    1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10

exact/norm bonds:
    9-17 10-21 11-12 12-13 17-19

exact bonds:
    5-7 6-10 7-8 8-9 9-10

normalized bonds:
    1-2 1-6 2-3 3-4 4-5 5-6
```

G1:0,S,N

G2:0, N, S, Ak

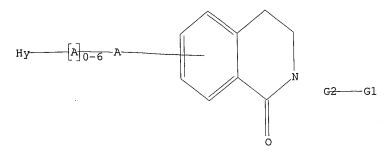
Match level:
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom
10:Atom 11:CLASS 12:CLASS 13:Atom 16:CLASS 17:CLASS 19:CLASS
21:CLASS

=> d his

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(FILE 'HOME' ENTERED AT 18:09:02 ON 19 MAR 2003)
    FILE 'REGISTRY' ENTERED AT 18:09:07 ON 19 MAR 2003
               STRUCTURE UPLOADED
L1
               QUE L1
L2
               STRUCTURE UPLOADED
L3
               QUE L3
L4
             3 S L4
L5
           894 S L4 SSS FUL
L6
           888 S L2 SUB=L6 FUL
L7
             6 S L6 NOT L7
\Gamma8
    FILE 'CAPLUS' ENTERED AT 18:12:01 ON 19 MAR 2003
           79 S L7
Ь9
            ANALYZE L9 1- RN HIT : 447 TERMS
L10
L11
            81 S L6
             2 S L11 NOT L9
L12
     FILE 'REGISTRY' ENTERED AT 18:13:46 ON 19 MAR 2003
               STRUCTURE UPLOADED
L13
                QUE L13
L14
              9 S L14
L15
            994 S L14 SSS FUL
L16
     FILE 'CAPLUS' ENTERED AT 18:14:44 ON 19 MAR 2003
           52 S L16
L17
     FILE 'REGISTRY' ENTERED AT 18:15:10 ON 19 MAR 2003
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L18
                QUE L18
L19
L20
             4 S L19
            464 S L19 SUB=L16 FUL
L21
               STRUCTURE UPLOADED
L22
               QUE L22
L23
              0 S L23
L24
              0 S L23 SUB=L16 FUL
L25
               STRUCTURE UPLOADED
L26
                QUE L26
L27
              0 S L27 SUB=L16 FUL
L28
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L29
             13 S L21
=> d 114
L14 HAS NO ANSWERS
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L13

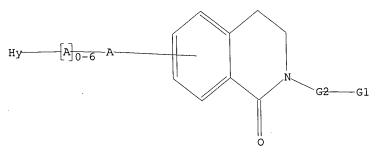
STR



G1 O,S,N G2 O,N,S,Ak

Structure attributes must be viewed using STN Express query preparation. L14 $$\tt QUE \tt ABB=ON \tt PLU=ON \tt L13$

=> d 119 L19 HAS NO ANSWERS L18 STR



G1 O,S,N G2 O,N,S,Ak

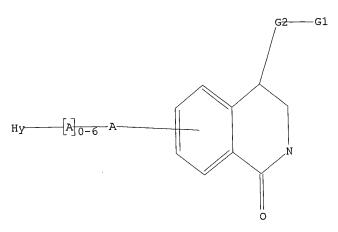
Structure attributes must be viewed using STN Express query preparation. L19 QUE ABB=ON PLU=ON L18

=> d 123 L23 HAS NO ANSWERS L22 STR 09/942,174

G1 O, S, N G2 O, N, S, Ak

Structure attributes must be viewed using STN Express query preparation. L23 QUE ABB=ON PLU=ON L22

=> d 126 L26 HAS NO ANSWERS L26 STR



G1 O, S, N G2 O, N, S, Ak

Structure attributes must be viewed using STN Express query preparation.

=> d bib abs hitstr 129 1-13

Page 3

```
ANSWER 1 OF 13 CAPLUS COPYRIGHT 2003 ACS
L29
     2002:171893 CAPLUS
AN
     136:232323
DN
     Compounds containing a pyridinylaminopropoxybicyclic ring system useful as
ΤI
     .alpha.v.beta.3 antagonists
     Ish, Kumar Khanna; Yi, Yu; Balekudru, Devadas; Hwang-Fun, Lu; Nizal, S.
IN
     Chandrakumar
     Pharmacia Corporation, USA
PA
     PCT Int. Appl., 125 pp.
SO
     CODEN: PIXXD2
     Patent
DΨ
     English
LA
FAN.CNT 1
                                             APPLICATION NO. DATE
                       KIND DATE
     PATENT NO.
                                             _____
                             _____
                       ____
                                            WO 2001-US26889 20010829
                             20020307
     WO 2002018377
                       A1
         ΡI
              PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
              US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                                               20010829
                                           AU 2001-88485
                             20020313
                        Α5
     AU 2001088485
                                                               20010829
                                             US 2001-942174
                             20020613
     US 2002072518
                        Α1
                             20000829
 PRAI US 2000-228693P
                        P
                              20010829
                        W
     WO 2001-US26889
     MARPAT 136:232323
os
```

$$\begin{array}{c} \text{Me} \\ \text{NH (CH2) 3.0} \\ \text{NCH2CO2H} \end{array}$$

Title compds. were prepd. for use as selective inhibitors or antagonists AΒ of the .alpha.v.beta.3 and/or .alpha.v.beta.5 integrin. Thus, the benzoxazepine I was prepd. by treating 4-benzyloxysalicylaldehyde with BrCMe2CO2CH2Ph and H2NCH2CO2CMe3, debenzylating, cyclizing, reaction with 2-(3-hydroxypropylamino)pyridine 1-oxide, redn. of the N-oxide, and ester hydrolysis. The compds. showed activity in several vitronectin receptor assays.

402933-61-3P TТ

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(compds. contg. a pyridinylaminopropoxybicyclic ring system useful as .alpha.v.beta.3 antagonists)

402933-61-3 CAPLUS RN

2(1H)-Isoquinolineacetic acid, 3,4-dihydro-1-oxo-6-[3-[(1,4,5,6-tetrahydro-CN 2-pyrimidinyl)amino]propoxy]-, ethyl ester (9CI) (CA INDEX NAME)

GΙ

$$\begin{array}{c|c}
O & & H \\
O & & N \\
EtO-C-CH_2 & & N
\end{array}$$

402933-62-4P 402933-78-2P IT

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(compds. contg. a pyridinylaminopropoxybicyclic ring system useful as .alpha.v.beta.3 antagonists)

RN 402933-62-4 CAPLUS

2(1H)-Isoquinolineacetic acid, 3,4-dihydro-1-oxo-6-[3-[(1,4,5,6-tetrahydro-CN2-pyrimidinyl)amino]propoxy]- (9CI) (CA INDEX NAME)

$$HO_2C-CH_2$$

O- $(CH_2)_3$

N

N

402933-78-2 CAPLUS RN

2(1H)-Isoquinolineacetic acid, 3,4-dihydro-1-oxo-6-[3-(2-CN pyridinylamino)propoxy]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM

CRN 402933-77-1 CMF C19 H21 N3 O4

CM

CRN 76-05-1 CMF C2 H F3 O2 09/942,174

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 2 OF 13 CAPLUS COPYRIGHT 2003 ACS
     2001:730707 CAPLUS
     135:267245
     Isoquinolone inhibitors of factor Xa, their preparation, and their
DN
     therapeutic use
     Marlowe, Charles K.; Li, Wenhao; Su, Ting; Scarborough, Robert M.
ΤN
     Cor Therapeutics, Inc., USA
PA
     PCT Int. Appl., 80 pp.
SO
     CODEN: PIXXD2
DT
     Patent
     English
LΑ
FAN.CNT 1
                                                APPLICATION NO. DATE
                        KIND DATE
     PATENT NO.
                                                WO 2001-US9376
                                                                   20010326
                               20011004
     WO 2001072712
                         A1
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
PΤ
              CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
              HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
              SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
          YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                                                    20010326
                                                US 2001-816771
                              20020516
      US 2002058677
                          A1
                                20021022
                          B2
      US 6469026
                                                EP 2001-922617
                                                                    20010326
                               20030102
                          Α1
      EP 1268432
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
               IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                20000324
 PRAI US 2000-192619P
                        P
                                20010326
                          W
      WO 2001-US9376
      MARPAT 135:267245
 OS
      Isoquinolone compds. (Markush included), including pharmaceutically
AB
      acceptable isomers, salts, hydrates, solvates, and prodrug derivs., having
      activity against mammalian factor Xa, are described. Compns. contg. such
      compds. are also described. The compds. and compns. are useful in vitro
      or in vivo for preventing or treating conditions in mammals characterized
      by undesired thrombosis.
       364048-79-3P 364048-80-6P 364048-81-7P
 IT
       364048-82-8P
      RL: BAC (Biological activity or effector, except adverse); BSU (Biological
       study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
       BIOL (Biological study); PREP (Preparation); USES (Uses)
          (isoquinolone inhibitors of factor Xa, prepn., and therapeutic use)
       364048-79-3 CAPLUS
 RN
       2(1H)-Isoquinolineacetic acid, .alpha.-[[3-(aminoiminomethyl)phenyl]methyl
       ]-3,4-dihydro-6-[[1-(1-iminoethyl)-4-piperidinyl]oxy]-1-oxo- (9CI)
       INDEX NAME)
                                     CO2H
                                                         -NH2
                                                       ЙH
```

NH

364048-80-6 CAPLUS RN

2(1H)-Isoquinolineacetic acid, .alpha.-[[3-(aminoiminomethyl)phenyl]methyl CN]-6-[[1-(aminoiminomethyl)-4-piperidinyl]oxy]-3,4-dihydro-1-oxo- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & & \\ & & & & \\ H_2N-C & & & & \\ \parallel & & & \\ NH & & & O & \\ \end{array}$$

364048-81-7 CAPLUS RN

2(1H)-Isoquinolineacetic acid, .alpha.-[[3-(aminoiminomethyl)phenyl]methyl CN]-3,4-dihydro-6-[[1-(1-iminoethyl)-4-piperidinyl]oxy]-1-oxo-, methyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ \text{Me-C} & & & \\ & & & \\ & & & \\ \text{NH} & & & \\ \end{array}$$

364048-82-8 CAPLUS RN

2(1H)-Isoquinolineacetic acid, .alpha.-[[3-(aminoiminomethyl)phenyl]methyl CN]-6-[[1-(aminoiminomethyl)-4-piperidinyl]oxy]-3,4-dihydro-1-oxo-, methyl ester (9CI) (CA INDEX NAME)

364048-75-9P 364048-76-0P 364048-77-1P IT

364048-78-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and reaction; isoquinolone inhibitors of factor Xa, prepn., and therapeutic use)

RN 364048-75-9 CAPLUS

2(1H)-Isoquinolineacetic acid, 3,4-dihydro-1-oxo-6-[[1-CN[(phenylmethoxy)carbonyl]-4-piperidinyl]oxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

364048-76-0 CAPLUS RN

2(1H)-Isoquinolineacetic acid, .alpha.-[[3-(aminoiminomethyl)phenyl]methyl CN]-3,4-dihydro-1-oxo-6-(4-piperidinyloxy)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & \\ & & \\$$

364048-77-1 CAPLUS RN

2(1H)-Isoquinolineacetic acid, .alpha.-[[3-(aminoiminomethyl)phenyl]methyl CN]-3,4-dihydro-6-[[1-(1-iminoethyl)-4-piperidinyl]oxy]-1-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

364048-78-2 CAPLUS RN

2(1H)-Isoquinolineacetic acid, .alpha.-[[3-(aminoiminomethyl)phenyl]methyl CN]-6-[[1-(aminoiminomethyl)-4-piperidinyl]oxy]-3,4-dihydro-1-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 3 OF 13 CAPLUS COPYRIGHT 2003 ACS
    2001:152935 CAPLUS
    134:193349
DN
    Preparation and antimicrobial activities of combinatorial libraries of
    4-unsubstituted dihydroisoquinolinone derivatives
    Motesharei, Kianoush; Lebl, Michal; Krchnak, Viktor; Ni, Yidong
IN
    Trega Biosciences, Inc., USA
PA
    PCT Int. Appl., 162 pp.
SO
     CODEN: PIXXD2
     Patent
DΤ
     English
LA
FAN.CNT 1
                                          APPLICATION NO. DATE
                     KIND DATE
     PATENT NO.
                                           _____
                                          WO 2000-US20774 20000728
     WO 2001014879
                            20010301
                      A1
PΙ
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE
                                          US 1999-378569
                                                           19990819
                            20020917
     US 6452009
                                                           20000728
                                          EP 2000-955287
                           20020605
     EP 1210598
                      Α1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI, CY
                            19990819
PRAI US 1999-378569
                       Α
                            20000728
     WO 2000-US20774
                       W
     MARPAT 134:193349
GΙ
```

$$\begin{array}{c|c}
X & Y \\
R^{1} (CO)_{n}N & R^{3} \\
& Z & O \\
& (CO)_{m}R^{2}
\end{array}$$

Dihydroisoquinolinones I [R1, R2 = H, alkyl, alkenyl, Ph, etc.; R3 = H, alkyl, heteroaryl, etc.; R4 = -, DWE and W = -, cycloalkyene, arylene, etc. and D and E = -, alkylene, alkynylene, etc.; R5 = -, O, S, amino; R6 = -, alkylene, alkenylene; R7 = H, halide, OR13, CO2R13, etc.; X, Y, Z = H, halo, OH, cyano, nitro, etc.; m, n, p = 0, 1 and when 0 the absent carbonyl can be replaced with SO2] were prepd. Thus, bromoacetic acid was coupled to a resin and the resulting compds. were coupled with 1,4-Boc-NH-CH2-Ph-COOH, deprotected, and reacted with an aldehyde. The resulting compds. were then reacted with 4-nitrohomophthalic acid, reduced with tin chloride, and the compds. were reacted with a carboxylic acid. The resulting compds. were then cleaved and extd. The melanocortin receptor assay and antimicrobial activity of I were investigated.

Ι

317837-21-1P 328059-23-0P 328059-26-3P 328059-28-5P 328059-51-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. and antimicrobial activities of combinatorial libraries of dihydroisoquinolinones)

317837-21-1 CAPLUS RN

2(1H)-Isoquinolinepropanamide, N-(2-amino-2-oxoethyl)-N-[2-CN(dimethylamino)ethyl]-7-[(2-furanylcarbonyl)amino]-3,4-dihydro-3-(1-naphthalenyl)-1-oxo- (9CI) (CA INDEX NAME)

328059-23-0 CAPLUS RN

2(1H)-Isoquinolinepropanamide, N-(2-amino-2-oxoethyl)-3-(3,4-difluorophenyl)-3,4-dihydro-7-[[(6-methyl-4-oxo-4H-1-benzopyran-2-CN yl)carbonyl]amino].-1-oxo-N-[[3-(trifluoromethyl)phenyl]methyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

328059-26-3 CAPLUS RN

2(1H)-Isoquinolinepropanamide, N-(2-amino-2-oxoethy1)-N-[2-amino-2-oxoethy1)-N-[2-amino-2-oxoethy1)]CN(dimethylamino)ethyl]-3,4-dihydro-3-(1-naphthalenyl)-1-oxo-7-

Page 12

09/942,174

[(pyrazinylcarbonyl)amino]- (9CI) (CA INDEX NAME)

328059-28-5 CAPLUS RN

2(1H)-Isoquinolinepropanamide, N-(2-amino-2-oxoethyl)-N-[2-(dimethylamino)ethyl]-3,4-dihydro-7-[[(4-methyl-1,2,3-thiadiazol-5-CNyl)carbonyl]amino]-3-(1-naphthalenyl)-1-oxo- (9CI) (CA INDEX NAME)

328059-51-4 CAPLUS

2(1H)-Isoquinolinepropanamide, N-(2-amino-2-oxoethyl)-N-[2-RN(dimethylamino)ethyl]-3-[4-(1,1-dimethylethyl)phenyl]-3,4-dihydro-7-[[(5-CN methylpyrazinyl)carbonyl]amino]-1-oxo- (9CI) (CA INDEX NAME)

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 6 ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 4 OF 13 CAPLUS COPYRIGHT 2003 ACS 2001:55332 CAPLUS 134:105835 Preparation and application of selenomethionine chrome sulfonylureas as DN ΤI hypoglycemics Dong, Guochen; Dong, Wenshuai INPeop. Rep. China PA Faming Zhuanli Shenqing Gongkai Shuomingshu, 16 pp. CODEN: CNXXEV DTPatent Chinese LΑ FAN.CNT 1 APPLICATION NO. DATE KIND DATE PATENT NO. _____ CN 1999-121819 19991018 20000510 CN 1252273 19991018 PRAI CN 1999-121819 Selenomethionine chrome sulfonylureas are obtained by reaction of chrome selenomethionine with sulfonylurea drugs such as glibenclamide, glipizide, gliclazide, gliquiudone, glibornuride, tolbutamide, and chlorpropamide, etc. The products are the third generation of oral hypoglycemic agents for treatment of type II diabetes mellitus. The compds. can be formulated into tablets and capsules. RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological ΙT study); PREP (Preparation); USES (Uses) (prepn. of selenomethionine chrome sulfonylureas as hypoglycemics) 318485-63-1 CAPLUS RN Chromium, tris[(2S)-2-(amino-.kappa.N)-4-[[2-[[2-[[[(cyclohexylamino)carbonyl]amino]sulfonyl]-1,2,3,4-tetrahydro-4,4-CN dimethyl-1,3-dioxo-7-isoquinolinyl]oxy]ethyl]seleno]butanoato-.kappa.0]-(9CI) (CA INDEX NAME)

PAGE 1-B

PAGE 2-A

PAGE 2-B

PAGE 2-C

GΙ

ANSWER 5 OF 13 CAPLUS COPYRIGHT 2003 ACS 2000:754527 CAPLUS 133:309849 Preparation of arylcarboxamidines as glycoprotein IIb/IIIa antagonists. DN Fisher, Matthew J.; Happ, Anne Marie; Jakubowski, Joseph A.; Kinnick, ΤT Michael Dean; Kline, Allen D.; Morin, John Michael, Jr.; Sall, Daniel J.; Skelton, Marshall A.; Vasileff, Robert Theodore Eli Lilly & Co., USA PA U.S., 69 pp., Cont.-in-part of U.S. 5,618,843. SO CODEN: USXXAM Patent DTEnglish LΑ FAN.CNT 5 APPLICATION NO. DATE KIND DATE PATENT NO. _____ ----US 1996-710823 19960923 20001024 . US 6137002 Α PΤ 19940708 US 1994-255821 19970408 Α US 5618843 US 1999-299404 19990426 20021029 В1 US 6472405 В2 19930722 PRAI US 1993-96220 US 1994-255821 19940708 A2 19960923 us 1996-710823 Α1 MARPAT 133:309849 OS

$$H_2N$$
 H_1N
 CO_2H
 II

Title compds. [I; rings AB = naphthyl, dihydronaphthyl, tetralinyl, decalinyl; R = H, alkyl, haloalkyl, alkenyl, alkynyl, cycloalkyl, aryl, aralkyl, OH, CO2H, amino, etc.; m, n = 2-6; p = 0-8; q = 1-3; R3 = CH2CO2H, NHCH2CO2H, OCH2CO2H, CH2CH2CO2H, CH:CHCO2H, CO2H, etc.; R10 = H, alkyl, haloalkyl, alkenyl, alkynyl, cycloalkyl, aryl, OH, alkoxy, aralkoxy, acyl, cyano, halo, NO2, etc.; L = 1-4 membered linking group contg. C, N, S, or O atoms; D = 6-membered ring wherein D1-D6 = C, N, O, S; .gtoreq.2 of D1-D6 = C; Q1 = (substituted) amino, imino, amidino, aminomethyleneamino, iminomethylamino, alkylamino, pyrrolyl, imidazolyl, pyranyl, pyrimidinyl, phthalazinyl, phenanthrolinyl, etc.; R20 = H, alkyl, haloalkyl, haloalkyl, alkenyl, alkynyl, cycloalkyl, aryl, aralkyl, OH, alkoxy, (substituted) amino, etc.], were prepd. Thus, title compd. (II) (prepd. from 6-benzyloxycarbonylamino-1-tetralone) inhibited ADP-induced

Ι

platelet aggregation with IC50 = 0.19 .mu.M.

164147-23-3P IT

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of arylcarboxamidines as glycoprotein IIb/IIIa antagonists)

164147-23-3 CAPLUS

2(1H)-Isoquinolinepropanoic acid, .beta.-(3-ethoxypropyl)-3,4-dihydro-1oxo-6-[3-(4-piperidinyl)propoxy]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

1 CM

CRN 164147-22-2 CMF C25 H38 N2 O5 (CH₂)₃HO2C-CH2

2 CM

76-05-1 CRN CMF C2 H F3 O2

- co2H

181073-73-4P ΙT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of arylcarboxamidines as glycoprotein IIb/IIIa antagonists)

181073-73-4 CAPLUS

2(1H)-Isoquinolinepropanoic acid, 6-[3-[1-[(1,1-dimethylethoxy)carbonyl]-4-CN piperidinyl]propoxy]-.beta.-(3-ethoxypropyl)-3,4-dihydro-1-oxo-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 6 OF 13 CAPLUS COPYRIGHT 2003 ACS
     1998:207260 CAPLUS
    128:257341
    Preparation of [(aminoiminomethyl)benzyloxy]isoquinolinylacetates,
DN
     -benzopyranylacetates, and related compounds as glycoprotein IIb/IIIa
TI
     antagonists
     Fisher, Matthew J.; Happ, Anne Marie; Jakubowski, Joseph A.; Kinnick,
IN
     Michael Dean; Kline, Allen D.; Martinelli, Michael John; Morin, John
     Michael, Jr.; Paal, Michael; Ruhter, Gerd; Ruterbories, Kenneth James;
     Sall, Daniel J.; Schotten, Theo; Skelton, Marshall A.; Stenzel, Wolfgang;
     Vasileff, Robert Theodore
     Eli Lilly and Co., USA
PA
     U.S., 104 pp., Cont.-in-part of U.S. 5,618,843.
SO
     CODEN: USXXAM
     Patent
DT
     English
LΑ
FAN.CNT 5
                                            APPLICATION NO. DATE
                      KIND DATE
     PATENT NO.
                                            -----
     _____
                                          US 1995-376191
                                                               19950119
                  A
                             19980324
     US 5731324
PΙ
                                            US 1994-255821 19940708
                             19970408
                       Α
     US 5618843
                                             TW 1995-84114190 19951230
                             20010121
     TW 419466
                       В
                                             CA 1996-2210682 19960118
                      AA 19960725
A1 19960725
     CA 2210682
                                            WO 1996-US586 19960118
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              SG, SI
          RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE
                                             AU 1996-47580
                                                               19960118
                        Al 19960807
      AU 9647580
                            19990610
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                        A1 19971105
      EP 804431
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      EP 804431
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                                             JP 1996-522354 19960118
                         T2 19990223
      JP 11502194
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                                              RU 1997-113756
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                                                                19970717
                       A
                              19970910
      NO 9703304
                                                                19980324
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                              20000201
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                         Α
                                              US 2001-883639
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                             20020910
                         В1
      US 6448269
                         B2 19930722
 PRAI US 1993-96220
                             19940708
                        A2
      US 1994-255821
                             19950119
      us 1995-376191
                         A
                         W
                               19960118
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                         A1
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       US 1999-412142
                         В1
       MARPAT 128:257341
 OS
  GT
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QLA2

A1

B1

B2

$$B^3$$
 B^3
 B^3
 B^3
 B^3
 B^3
 B^3
 B^3
 B^3
 B^3

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

Title compds. [I; A1-A4, B1-B4 = C, O, S, N; 2 of B1-B4 = C; L = bond, divalent (substituted) chain of 1-10 atoms; Q = basic group; R3 = acidicgroup (deriv.); R, R10 = H, alkyl, haloalkyl, alkenyl, alkynyl, cycloalkyl, aryl, aralkyl, OH, alkoxy, aralkoxy, amino, carbamyl, CO2H, acyl, cyano, halo, NO2, sulfo, O, S; m, n = 2-6; dotted lines = optional double bonds; with provisos], were prepd. Thus, title compd. (II) (prepn. given) inhibited ADP-induced platelet aggregation with IC50 = 0.078 .mu.M.

164147-23-3P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of [(aminoiminomethyl)benzyloxy]isoquinolinylacetates, -benzopyranylacetates, and related compds. as glycoprotein IIb/IIIa antagonists)

164147-23-3 CAPLUS RN

2(1H)-Isoquinolinepropanoic acid, .beta.-(3-ethoxypropyl)-3,4-dihydro-1oxo-6-[3-(4-piperidinyl)propoxy]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM1

IT

164147-22-2 CRN CMF C25 H38 N2 O5

2 CM

Page 20

CRN 76-05-1 CMF C2 H F3 O2

CN

IT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of [(aminoiminomethyl)benzyloxy]isoquinolinylacetates, -benzopyranylacetates, and related compds. as glycoprotein IIb/IIIa antagonists)

181073-73-4 CAPLUS RN

2(1H)-Isoquinolinepropanoic acid, 6-[3-[1-[(1,1-dimethylethoxy)carbonyl]-4piperidinyl]propoxy]-.beta.-(3-ethoxypropyl)-3,4-dihydro-1-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

```
L29 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2003 ACS
      1997:547298 CAPLUS
      Pyridine derivatives and analogs useful as vitronectin receptor
      127:149074
DN
      Ali, Fadia E.; Bondinell, William E.; Keenan, Richard M.; Ku, Thomas Wen
      antagonists
ΙN
      Fu; Miller, William H.; Samanen, James
      Smithkline Beecham Corporation, USA; Ali, Fadia E.; Bondinell, William E.; Keenan, Richard M.; Ku, Thomas Wen Fu; Miller, William H.; Samanen, James
      PCT Int. Appl., 123 pp.
SO
      CODEN: PIXXD2
ĎΤ
      Patent
      English
LΑ
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                                                  APPLICATION NO. DATE
                          KIND DATE
      PATENT NO.
                                                   ______
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                                  19970710 WO 1996-US20744 19961220
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KP, KR, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, SG,

SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,

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MR, NE, SN, TD, TG
      WO 9724122
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                                                     AU 1997-13538
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                                               AU 1997-1001
EP 1996-945085
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                                                                          19961220
                                                     JP 1997-524556
                           T2 20000307
       JP 2000502708
                                                                          19961223
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                           A 19971124
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                                   19980826
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       NO 9803002
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19951229
                                                                         20010124
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       US 2001034445
                             A1
 PRAI US 1995-9532P
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                                  19961220
        WO 1996-US20744
       US 1998-91936 B1 19981203
       MARPAT 127:149074
  OS
  GΙ
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$$\begin{array}{c|c} & & & \\ & & & \\$$

Title compds. I [A = fibrinogen antagonist template; W = (CHR3)nU(CHR3)mV; AB X, Y, Z = N or CR4, provided that at most one is N; R1 = H, alkyl, cycloalkyl(alkyl), aryl(alkyl); R2 = R1, COR1, CO2R1; R3 = H, alkyl, heterocyclyl(alkyl), cycloalkyl(alkyl), aryl(alkyl); R4 = H, halo, OR3, SR3, cyano, (un) substituted NH2, etc.; U, V = bond, CO, CR3R3, S, SO, SO2, O, NR3, etc.; n, m = 0, 1, 2; p, q = 0, 1; with addnl. provisos] are disclosed. The compds. are vitronectin receptor antagonists, useful in the treatment of osteoporosis and other conditions. I are said to inhibit binding of SKF 107260 to vitronectin receptor in vitro at 0.01 to 25 .mu.M, with some compds. showing at least a 4-fold (and in some cases 10-fold) greater affinity for vitronectin receptor over fibrinogen receptor. Examples include prepns. of 35 title compds., with characterizing data for 4 of them. For instance, amidation of 6-[(methylamino)methyl]-2-pyridinamine with the corresponding carboxybenzodiazepineacetate deriv., and sapon. of the product with LiOH in aq. THF, gave title compd. II.

I

IT 193470-40-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; prepn. of pyridine derivs. and analogs as vitronectin receptor antagonists)

RN 193470-40-5 CAPLUS

CN 2(1H)-Isoquinolineacetic acid, 6-[[[(6-amino-2-pyridinyl)methyl]methylamino]carbonyl]-3,4-dihydro-1-oxo-, ethyl ester (9CI) (CA INDEX NAME)

IT 193470-11-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological

Page 23

$$\begin{array}{c|c} \text{O} & \text{Me} \\ \parallel & \parallel \\ \text{C} - \text{N} - \text{CH}_2 \\ \parallel & \parallel \\ \text{N} \\ \text{HO}_2\text{C} - \text{CH}_2 \\ \text{O} \\ \end{array}$$

```
L29 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2003 ACS
      1997:547296 CAPLUS
ΑN
      127:161822
      Benzimidazole derivatives and analogs as vitronectin receptor antagonists.
DN
     Miller, William Henry; Bondinell, William Edward; Ku, Thomas Wen-fu;
TI
      Keenan, Richard Mcculloch; Samanen, James Martin; Kwon, Chet; Ali, Fadia
      El-fehail; Lago, Maria A.
      Smithkline Beecham Corporation, USA; Miller, William Henry; Bondinell,
      William Edward; Ku, Thomas Wen-Fu; Keenan, Richard Mcculloch; Samanen,
PA
      James Martin; Kwon, Chet; Ali, Fadia El-Fehail; Lago, Maria A.
      PCT Int. Appl., 238 pp.
SO
      CODEN: PIXXD2
      Patent
ТΩ
      English
LА
FAN.CNT 1
                                                   APPLICATION NO. DATE
                          KIND DATE
      PATENT NO.
                                                   _____
                                  _____
                          ____
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                                 19970710
      WO 9724119
PΤ
                MR, NE, SN, TD, TG
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       CA 2241633
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       AU 9713540
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                                                    EP 1996-945087
                                  19981014
       EP 869787
                            A1
           R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                IE, FI
                                                    CN 1996-180113
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       CN 1209744
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                                                                         19961220
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                                  19971024
       ZA 9610859
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                                   19980826
                            Α
       NO 9803003
                                   19951229
 PRAI US 1995-9366P
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                                   19961220
       WO 1996-US20748
                            W
       MARPAT 127:161822
 OS
 GΙ
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$$N$$
 N N R^2 N R^3 R^2 N R^3

$$\begin{array}{c|c} H & CO_2H \\ \hline M & N & M \\ \hline N & O & II \\ \end{array}$$

Page 25

A variety of imidazoles, benzimidazoles, and analogs are disclosed, e.g., AΒ I [W = XV or C6H4; X = bond, (un) substituted CH2 or CH2CH2; V = certain substituted CONH or NHCO linkages; R1, R2 = H, alkyl, aralkyl, heteroaralkyl, halo, CF3, etc.; or R1R2 forms (un) substituted 5- or 6-membered carbo- or heterocyclic ring; R3 = H, alkyl, aralkyl; A = fibrinogen receptor antagonist template]. The compds. are vitronectin receptor antagonists, useful in the treatment of osteoporosis. Invention compds. are said to inhibit binding of SKF 107260 to vitronectin receptor at 0.001 to 50 .mu.M, and to have a vitronectin receptor Ki approx. 10- to 100-fold greater than that at the fibrinogen receptor. Over 80 example compds. are given, with characterization of 59 compds. For instance, title compd. II was prepd. by amidation of 2-(aminomethyl)-4-aza-5methylbenzimidazole di-HCl with the corresponding carboxybenzodiazepineacetate deriv., using EDC and HOBt, followed by sapon. with LiOH in aq. THF.

193533-06-1P

ΙT

CN

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of benzimidazole derivs. and analogs as vitronectin receptor antagonists)

193533-06-1 CAPLUS RN

2(1H)-Isoquinolineacetic acid, 6-[[(1H-benzimidazol-2ylmethyl)amino]carbonyl]-3,4-dihydro-1-oxo- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & O \\
 & N \\
 & NH
\end{array}$$

$$\begin{array}{c}
 & O \\
 & CH_2 - NH - C
\end{array}$$

$$\begin{array}{c}
 & O \\
 & O \\
 & O \\
 & O \\
\end{array}$$

$$\begin{array}{c}
 & CH_2 - CO_2H \\
 & O \\
\end{array}$$

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI 19990713 BR 1996-12381 19961220 BR 9612381 Α JP 1997-524453 19961220 JP 2000502704 Т2 20000307 19961223 ZA 1996-10854 19980402 ZA 9610854 Α NO 1998-3001 19980626 NO 9803001 Α 19980826 US 6159964 20001212 US 1999-91937 19990727 Α

19990407

A1

PRAI US 1995-9367P 19951229 Ρ WO 1996-US20327 W 19961220

MARPAT 127:149073 OS

EP 906103

GΙ

$$\begin{array}{c|c} & H & \\ & N & \\ & N & \\ & & N & \\ & &$$

I

II

Page 27

Title compds. I [A = fibrinogen antagonist template; W = (CHR2)nU(CHR2)mV; G, X, Y, Z = N or CR3, provided that no more than one is N; R1 = H, alkyl, cycloalkyl(alkyl), aryl(alkyl); R2 = H, alkyl, heterocyclyl(alkyl), cycloalkyl(alkyl), aryl(alkyl); R3 = H, halo, OR2, SR2, cyano, (un)substituted NH2, etc.; U, V = bond, CO, CR2R2, S, SO, SO2, O, NR2, etc.; n = 0, 1, 2, 3; m = 0, 1, 2; p = 0, 1] are disclosed. The compds. are vitronectin receptor antagonists, useful in the treatment of osteoporosis and other conditions. I are said to inhibit binding of SKF 107260 to vitronectin receptor in vitro at 0.01 to 25 .mu.M, with some compds. showing at least a 4-fold (and in some cases 10-fold) greater affinity for vitronectin receptor over fibrinogen receptor. Examples include prepns. of 41 title compds., with characterizing data for several of them. For instance, amidation of N-(2-pyridinyl)ethylenediamine with the corresponding carboxybenzodiazepineacetate deriv., and sapon. of the product with LiOH in aq. THF, gave title compd. II.

IT 193473-43-7P

RN

CN

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of pyridine derivs. and analogs as vitronectin receptor antagonists)

193473-43-7 CAPLUS

2(1H)-Isoquinolineacetic acid, 3,4-dihydro-1-oxo-6-[[[2-(2-pyridinylamino)ethyl]amino]carbonyl]- (9CI) (CA INDEX NAME)

ANSWER 10 OF 13 CAPLUS COPYRIGHT 2003 ACS

1997:397193 CAPLUS

DN 127:17561

Non-Peptide RGD Surrogates Which Mimic a Gly-Asp .beta.-Turn: Potent ΤI Antagonists of Platelet Glycoprotein IIb-IIIa

Fisher, Matthew J.; Gunn, Bruce; Harms, Cathy S.; Kline, Allen D.; Mullaney, Jeffrey T.; Nunes, Anne; Scarborough, Robert M.; Arfsten, Ann E.; Skelton, Marshall A.; Um, Suzane L.; Utterback, Barbara G.; Jakubowski, Joseph A.

Lilly Research Laboratories, Eli Lilly and Company, Indianapolis, IN, CS 46285, USA

Journal of Medicinal Chemistry (1997), 40(13), 2085-2101 SO CODEN: JMCMAR; ISSN: 0022-2623

American Chemical Society ΡВ

Journal DT

LΑ English

A cyclic heptapeptide which contains an Arg-Gly-Asp sequence has good AB affinity for the platelet receptor GPIIb-IIIa and was chosen for study by 1H NMR techniques. The key RGD sequence of this mol. was found to reside in a conformationally defined type II' Gly-Asp .beta.-turn, and this information was used in the design of simple non-peptide RGD mimics. Disubstituted isoquinolones bearing an acidic side chain at position 2 and a basic side chain at position 6 were prepd. and found to have modest affinity for GPIIb-IIIa. Systematic modification of the basic residue contained in these mols. yielded compds. with high affinity for GPIIb-IIIa.

190604-59-2P 190604-60-5P 190604-61-6P IT 190604-62-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(nonpeptide RGD surrogates which mimic a Gly-Asp .beta.-turn as antagonists of platelet glycoprotein IIb-IIIa)

190604-59-2 CAPLUS RN

2(1H)-Isoquinolineacetic acid, 3,4-dihydro-1-oxo-6-(4-piperidinylmethoxy)-CN(9CI) (CA INDEX NAME)

RN 190604-60-5 CAPLUS

2(1H)-Isoquinolineacetic acid, 3,4-dihydro-1-oxo-6-[2-(4-CN piperidinyl)ethoxy]- (9CI) (CA INDEX NAME)

RN 190604-61-6 CAPLUS CN 2(1H)-Isoquinolineacetic acid, 3,4-dihydro-1-oxo-6-[3-(4-piperidinyl)propoxy]- (9CI) (CA INDEX NAME)

RN 190604-62-7 CAPLUS CN 2(1H)-Isoquinolineacetic acid, 3,4-dihydro-1-oxo-6-[4-(4-piperidinyl)butoxy]- (9CI) (CA INDEX NAME)

IT 190604-28-5P 190604-29-6P 190604-30-9P 190604-31-0P 190604-49-0P 190604-50-3P 190604-55-8P 190604-56-9P 190604-57-0P 190604-58-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(nonpeptide RGD surrogates which mimic a Gly-Asp .beta.-turn as antagonists of platelet glycoprotein IIb-IIIa)

RN 190604-28-5 CAPLUS

CN 2(1H)-Isoquinolineacetic acid, 6-[3-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)propoxy]-3,4-dihydro-1-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 190604-29-6 CAPLUS

2(1H)-Isoquinolineacetic acid, 6-[4-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)butoxy]-3,4-dihydro-1-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX CN NAME)

190604-30-9 CAPLUS RN

2(1H)-Isoquinolineacetic acid, 6-[[5-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-CN yl)pentyl]oxy]-3,4-dihydro-1-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

190604-31-0 CAPLUS RN

2(1H)-Isoquinolineacetic acid, 6-[[6-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-CN yl)hexyl]oxy]-3,4-dihydro-1-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Page 31

190604-49-0 CAPLUS

2(1H)-Isoquinolineacetic acid, 7-[3-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-CN yl)propoxy]-3,4-dihydro-1-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX

190604-50-3 CAPLUS RN

2(1H)-Isoquinolineacetic acid, 7-[4-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)butoxy]-3,4-dihydro-1-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX CNNAME)

RN190604-55-8 CAPLUS

2(1H)-Isoquinolineacetic acid, 6-[[1-[(1,1-dimethylethoxy)carbonyl]-4-[]CN piperidinyl]methoxy]-3,4-dihydro-1-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

190604-56-9 CAPLUS RN

2(1H)-Isoquinolineacetic acid, 6-[2-[1-[(1,1-dimethylethoxy)carbonyl]-4-[1-[(1,1-dimethylethoxy]carbonyl]-4-[1-[(1,1-dimethylethoxy]carbonyl]-4-[1-[(1,1-dimethylethoxy]carbonyl]-4-[1-[(1,1-dimethylethoxy]carbonyl]-4-[1-[(1,1-dimethylethoxy]carbonyl]-4-[1-[(1,1-dimethylethoxy]carbonyl]-4-[1-[(1,1-dimethylethoxy]carbonyl]-4-[1-[(1,1-dimethylethoxy]carbonyl]-4-[1-[(1,1-dimethylethoxy]carbonyl]-4-[1-[(1,1-dimethylethoxy]carbonyl]-4-[1-[(1,1-dimethylethoxy]caCN piperidinyl]ethoxy]-3,4-dihydro-1-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 190604-57-0 CAPLUS

CN 2(1H)-Isoquinolineacetic acid, 6-[3-[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]propoxy]-3,4-dihydro-1-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 190604-58-1 CAPLUS

CN 2(1H)-Isoquinolineacetic acid, 6-[4-[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]butoxy]-3,4-dihydro-1-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

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ANSWER 11 OF 13 CAPLUS COPYRIGHT 2003 ACS
⊾⊉9
AN
    1997:287128 CAPLUS
    126:330553
DN
    Preparation of (guanidinophenyl)isoquinolinonecarboxylates,
ΤI
    -naphthalenonecarboxylates, and related compounds as glycoprotein IIb/IIIa
    Fisher, Matthew J.; Happ, Anne M.; Jakubowski, Joseph A.; Kinnick, Michael
IN
    D.; Kline, Allen D.; Morin, Jr John M.; Sall, Daniel J.; Skelton, Marshall
    A.; Vasileff, Robert T.
    Eli Lilly and Company, USA
PA
    U.S., 62 pp., Cont.-in-part of U.S. Ser. No. 96,220, abandoned.
SO
    CODEN: USXXAM
DT
    Patent
    English
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                                        APPLICATION NO. DATE
    PATENT NO.
                    KIND DATE
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                    B1 20021002
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                                        ZA 1994-5251 19940718
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                                                         19940722
                                         CN 1994-109191
                          19950913
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                          20001011
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                     A2
                                         JP 1994-170747
     JP 08188564
                                                        19950119
                                         US 1995-376191
                          19980324
     US 5731324
                     Α
                                         US 1996-710823
                                                       19960923
     US 6137002
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                                                         19990426
                         20021029
     US 6472405
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                                                         19990731
                          20001129
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     CN 1274723
                    A
                                                         20000320
                    Α
                                         FI 2000-648
                          20000320
     FI 2000000648
                                         US 2001-883639
                                                        20010618
                      В1
                          20020910
     US 6448269
                          19930722
PRAI US 1993-96220
                     В2
                          19940708
     US 1994-255821
                    Α
     US 1995-376191 A1
                          19950119
                          19960923
     US 1996-710823
                   A1
                     A1
                           19980324
     US 1998-47285
                           19991005
     US 1999-412142
                      В1
     MARPAT 126:330553
os
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GΙ

$$(R^{10}) \stackrel{A2}{m} \xrightarrow{A3} \stackrel{A1}{\underset{A4}{\longrightarrow}} \stackrel{B1}{\underset{B4}{\longrightarrow}} (R^{0}) \stackrel{}{n}$$

AB Title compds. [I; A1-A4, B1-B4 = C, O, S, N; .gtoreq.2 of A1-A4 and B1-B4 = C; L = bond, divalent (substituted) chain of 1-10 atoms; Q = org. group contg. .gtoreq.1 basic group; R3 = acidic group or salt, solvate, or prodrug thereof; R0, R10 = H, alkyl, haloalkyl, alkenyl, alkynyl, cycloalkyl, aryl, aralkyl, OH, alkoxy, aralkoxy, amino, carbamyl, C02H, acyl, cyano, halo, N02, sulfo; m, n = 2-6], were prepd. Thus, title compd. (II) (multistep prepn. given) inhibited ADP-induced platelet aggregation with IC50 = 0.1 .mu.M.

IT 164147-23-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of (guanidinophenyl)isoquinolinonecarboxylates,
-naphthalenonecarboxylates, and related compds. as glycoprotein
IIb/IIIa antagonists)

RN 164147-23-3 CAPLUS CN 2(1H)-Isoquinolinep

2(1H)-Isoquinolinepropanoic acid, .beta.-(3-ethoxypropyl)-3,4-dihydro-1-oxo-6-[3-(4-piperidinyl)propoxy]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 164147-22-2 CMF C25 H38 N2 O5

CM 2

09/942,174

CRN 76-05-1 CMF C2 H F3 O2

IT 181073-73-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
 (prepn. of (guanidinophenyl)isoquinolinonecarboxylates,
 -naphthalenonecarboxylates, and related compds. as glycoprotein
 IIb/IIIa antagonists)
181073-73-4 CAPLUS
2(1H)-Isoquinolinepropanoic acid, 6-[3-[1-[(1,1-dimethylethoxy)carbonyl]-4

RN 181073-73-4 CAPLUS
CN 2(1H)-Isoquinolinepropanoic acid, 6-[3-[1-[(1,1-dimethylethoxy)carbonyl]-4-piperidinyl]propoxy]-.beta.-(3-ethoxypropyl)-3,4-dihydro-1-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

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ANSWER 12 OF 13 CAPLUS COPYRIGHT 2003 ACS
AM 1996:560689 CAPLUS
    125:195447
DN
     Preparation of bicyclic aryl and heteroaryl compounds as glycoprotein
     IIb/IIIa antagonists
ΤN
     Fisher, Matthew Joseph; Jakubowski, Joseph Anthony; Martinelli, Michael
     John; Morin, John Michael, Jr.; Paal, Michael; Ruhter, Gerd; Ruterbories,
     Kenneth James; Schotten, Theo; Stenzel, Wolfgang; Vasileff, Robert
     Theodore
PA
     Lilly, Eli, and Co., USA
    PCT Int. Appl., 310 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
    English
FAN.CNT 5
     PATENT NO.
                     KIND DATE
                                           APPLICATION NO. DATE
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                           _____
                                           -----
                                                            _____
     WO 9622288
                     A1 19960725
                                         WO 1996-US586 19960118
PΤ
         W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,
             ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT,
             LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
         SG, SI

RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE
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                     A 19980324
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                           19960807
                                           AU 1996-47580
                                                            19960118
     AU 706278
                          19990610
                       В2
     EP 804431
                       Α1
                            19971105
                                           EP 1996-903516
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     EP 804431
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                            20020724
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                            19970821
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    NO 9703304
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                                           NO 1997-3304
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PRAI US 1995-376191
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                           19950119
    US 1993-96220
                     B2
                          19930722
     US 1994-255821
                      A2
                           19940708
    WO 1996-US586
                      W
                            19960118
OS
    MARPAT 125:195447
GΙ
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$$(Q(L)A^{2})^{A^{1}} \downarrow A \qquad B^{1} \downarrow B^{2} \downarrow B^{3}R^{3} \qquad (R^{0})_{n}$$

$$(R^{10})_{m} \downarrow A \qquad B^{4} \downarrow B^{3}R^{3} \qquad I$$
Bochn
$$(R^{10})_{m} \downarrow A \qquad B^{1} \downarrow B^{2} \downarrow B^{3}R^{3} \qquad B^{3} \downarrow B^{3} \qquad B^{3$$

AB The title compds. [I; R0 = H, alkyl, alkenyl, etc.; R3 = acidic group contg. one or more acid radicals; R10 = H, alkyl, alkenyl, etc.; Q = basic group contg. one or more basic radicals; L = bond, (substituted) chain; n, m = 0-6; AB = benzopyran, isoquinoline, isoquinolone, tetrahydronaphthalene, dihydronaphthalene, tetralone], platelet aggregation inhibitors useful in alleviating the effects of atherosclerosis and arteriosclerosis, acute myocardial infarction, stable and unstable angina, transient ischemic attacks and strokes, arterial thrombosis, preeclampsia, embolism and restenosis, were prepd. and formulated. Thus, redn. of lactone II with DIBAL-H in CH2C12/PhMe followed by reaction of the intermediate III with EtoCOCH: PPh3 in PhMe, deprotection of acetate IV with TFA, reaction of unprotected acetate IV with 4-NCC6H4COCl treatment of the intermediate V with gaseous HCl in EtOH and subsequently with NH3/EtOH afforded the desired product I [AB = $\frac{1}{2}$] benzopyran; B4 = 0; R1, R10 = H; R3 = CH2COOEt; QL = 4-NH:C(NH2)C6H4CONH; dotted bonds in ring A = unsatd.; dotted bonds B1B2 and B3B4 = satd.] which showed IC50 of 0.77 .mu.M against GPIIb-IIIa.

IT 164147-23-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of bicyclic aryl and heteroaryl compds. as glycoprotein IIb/IIIa antagonists)

RN 164147-23-3 CAPLUS

2(1H)-Isoquinolinepropanoic acid, .beta.-(3-ethoxypropyl)-3,4-dihydro-1-oxo-6-[3-(4-piperidinyl)propoxy]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 164147-22-2 CMF C25 H38 N2 O5

CN

2 CM

CRN 76-05-1 CMF C2 H F3 O2

IT 181073-73-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of bicyclic aryl and heteroaryl compds. as glycoprotein IIb/IIIa antagonists)

RN181073-73-4 CAPLUS

2(1H)-Isoquinolinepropanoic acid, 6-[3-[1-[(1,1-dimethylethoxy)carbonyl]-4-CN piperidinyl]propoxy]-.beta.-(3-ethoxypropyl)-3,4-dihydro-1-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

ANSWER 13 OF 13 CAPLUS COPYRIGHT 2003 ACS

AN 1995:638314 CAPLUS

DN 123:32968

TI Preparation of hydroarylalkanoates as glycoprotein IIb/IIIa antagonists

IN Fisher, Matthew Joseph; Happ, Anne Marie; Jakubowski, Joseph Anthony; Kinnick, Michael Dean; Kline, Allen Dale; Morin, John Michael, Jr.; Sall, Daniel Jon; Skelton, Marshall Alan; Vasileff, Robert Theodore

PA Lilly, Eli, and Co., USA

SO Eur. Pat. Appl., 108 pp. CODEN: EPXXDW

DT Patent

LA English

EAN CMT 5

FAN. CNT 5				
	PATENT NO.	KIND	DATE	APPLICATION NO. DATE
ΡI	EP 635492	A1	19950125	EP 1994-305241 19940718
	EP 635492	B1	20021002	
	R: AT, BE,	CH, DE	, DK, ES, FR	, GB, GR, IE, IT, LI, LU, NL, PT, SE
	US 5618843	A	19970408	US 1994-255821 19940708
PRAI	US 1993-96220	A	19930722	
	US 1994-255821	A	19940708	
os	MARPAT 123:3296	8		
GI	•			

QLA2
$$A^1$$
 B^1 B^2 B^2 B^3 B^3

AB Title compds. [I; 2 of A1-A2, B1-B2 = C and the others = C, O, S, N; L = bond or a divalent (un)substituted chain of 1-10 atoms selected from C, N, S, O (sic); Q = an org. group comprising a basic radical (sic); R = H, OH, (cyclo)alkyl, alkenyl, alkoxy, aryl(alkyl), etc.; R3 = acidic group (sic); R10 = groups cited for R, etc.; m,n = 2-6] were prepd. Thus, 6-acetamido-.alpha.-tetralone was condensed with OHCCO2H and the product converted in 3 steps to title compd. II (R1 = Et, R2 = H) which was amidated by 4-(NC)C6H4CO2H to give, in 2 addnl. steps, II [R1 = H, R2 = 4-[H2N(HN:)C]C6H4CO]. The latter had IC50 of 0.06.mu.M against ADP-induced aggregation in human platelet rich plasma.

IT 164147-23-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of hydroarylalkanoates as glycoprotein IIb/IIIa antagonists)

RN 164147-23-3 CAPLUS

CN 2(1H)-Isoquinolinepropanoic acid, .beta.-(3-ethoxypropyl)-3,4-dihydro-1-oxo-6-[3-(4-piperidinyl)propoxy]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

09/942,174

CRN 164147-22-2 CMF C25 H38 N2 O5

CM 2

CRN 76-05-1 CMF C2 H F3 O2

IT 164148-50-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of hydroarylalkanoates as glycoprotein IIb/IIIa antagonists) RN 164148-50-9 CAPLUS